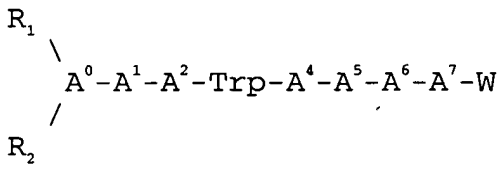
AMENDMENT

In the Claims:

1-8 (canceled)

9 (new): A method of inhibiting tumor growth which comprises administering to a patient in need thereof an effective amount of a therapeutic peptide of the formula:



wherein

A^0 = Gly, Nle, α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal, or is deleted;

A^1 = the D or L-isomer of any of pGlu, Nle, or α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), F_5-Phe, Trp, Cys, or β-Nal, or is deleted;

A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, β-Nal, His, 1-methyl-His, or 3-methyl-His;

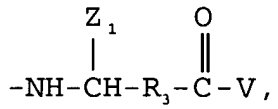
A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α-aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α-aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH_3), Trp, Thr, or β-Nal;

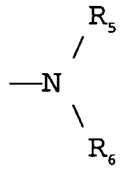
A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

A^7 = 1-methyl-His, 3-methyl-His or His;
provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

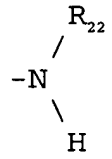
(I):



wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH, or CH_3), F_5-Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β-Nal; and V is either OR_4, or

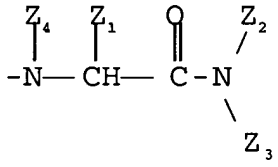


where R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and each R_5, and R_6, independently, is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, lower acyl, or



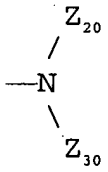
where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

(II):



wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β-Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3), F_5-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2, Z_3, and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):



wherein each Z_{20} and Z_{30}, independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2, independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10}

phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1, the other must be H, or a pharmaceutically acceptable salt thereof.

10 (new): The method of claim 9 wherein said therapeutic peptide is of the formula:

A^0 = Gly, D-Phe, or is deleted;

A^1 = p-Glu, D-Phe, D-Ala, D-β-Nal, D-Cpa, or D-Asn;

A^2 = Gln, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala;

A^5 = Val;

A^6 = Sar, Gly, D-Phe, or D-Ala;

A^7 = His;

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2, Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is $CHOH$-CH_2, Z_1 is the identifying group of Leu, cyclohexyl-Ala, or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR_6, and R_6 is NH_2; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3); and each Z_2, Z_3 and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30}, is H; and each R_1 and R_2, independently, is H, lower alkyl, or lower acyl.

11 (new): The method of claim 10 wherein said therapeutic peptide is of the formula:
D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

12 (new): The method of claim 10 wherein said therapeutic peptide is of the formula:
p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

13 (new): The method of claim 10 wherein said therapeutic peptide is of the formula:

D-Cpa-Gln-Trp-Ala-Val-Gly-His-β-Leu-NH_2.

14 (new): The method of claim 9 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4, and R_4 is any of C_{1-20}alkyl, C_{3-20}alkenyl, C_{3-20}alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F_5-Phe.

15 (new): The therapeutic peptide of claim 14 of the formula:
D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

16 (new): The therapeutic peptide of claim 10 of the formula:
D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH_2.

17 (new): The method of claim 9 wherein said tumor is located in the gastrointestinal tract, pancreas, colon, prostrate or breast.

18 (new): The method of claim 9 wherein said tumor is a small-cell lung carcinoma.

19 (new): The method of claim 9 wherein said effective amount is 0.5 μg/kg/day to 5 mg/kg/day.

20 (new): The method of claim 9 wherein said effective amount is 250 mg/patient/day.

21 (new): A method of inhibiting pancreatic adenocarcinomas which comprises administering to a patient in need thereof an effective amount of a therapeutic compound of the formula:

$$R_1 \diagdown \\ \quad A^0\text{-}A^1\text{-}A^2\text{-}Trp\text{-}A^4\text{-}A^5\text{-}A^6\text{-}A^7\text{-}W \\ \diagup \ R_2$$

wherein

A^0 = Gly, Nle, α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal, or is deleted;

A^1 = the D or L-isomer of any of pGlu, Nle, or α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), F_5-Phe, Trp, Cys, or β-Nal, or is deleted;

A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, β-Nal, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α-aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

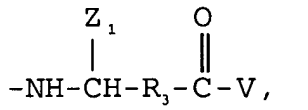
A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α-aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH_3), Trp, Thr, or β-Nal;

A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

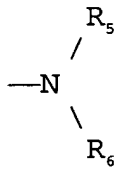
A^7 = 1-methyl-His, 3-methyl-His or His;

provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

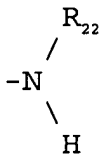
(I):



wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH, or CH_3), F_5-Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β-Nal; and V is either OR_4, or

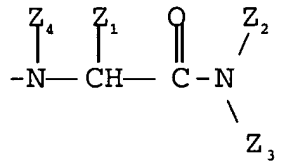


where R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and each R_5, and R_6, independently, is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, lower acyl, or



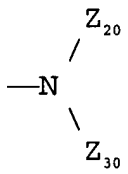
where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

(II):



wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β-Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3), F_5-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2, Z_3, and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):



wherein each Z_{20} and Z_{30}, independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2, independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1, the other must be H, or a pharmaceutically acceptable salt thereof.

22 (new): The method of claim 21 wherein said therapeutic peptide is of the formula:

A^0 = Gly, D-Phe, or is deleted;

A^1 = p-Glu, D-Phe, D-Ala, D-β-Nal, D-Cpa, or D-Asn;

A^2 = Gln, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala;

A^5 = Val;

A^6 = Sar, Gly, D-Phe, or D-Ala;

A^7 = His;

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2, Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is CHOH-CH_2, Z_1 is the identifying group of Leu, cyclohexyl-Ala, or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR_6, and R_6 is NH_2; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3); and each Z_2, Z_3 and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30}, is H; and each R_1 and R_2, independently, is H, lower alkyl, or lower acyl.

23 (new): The method of claim 22 wherein said therapeutic peptide is of the formula:
D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

24 (new): The method of claim 22 wherein said therapeutic peptide is of the formula:
p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

25 (new): The method of claim 22 wherein said therapeutic peptide is of the formula:
D-Cpa-Gln-Trp-Ala-Val-Gly-His-β-Leu-NH_2.

26 (new): The method of claim 21 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4, and R_4 is any of C_{1-20}alkyl, C_{3-20}alkenyl, C_{3-20}alkinyl, phenyl,

naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F_5-Phe.

27 (new): The therapeutic peptide of claim 26 of the formula:

D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

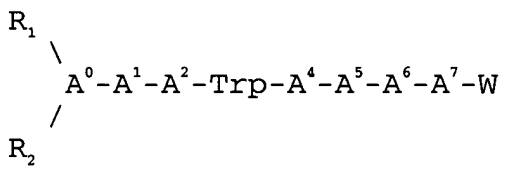
28 (new): The therapeutic peptide of claim 22 of the formula:

D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH_2.

29 (new): The method of claim 21 wherein said effective amount is 0.5 μg/kg/day to 5 mg/kg/day.

30 (new): The method of claim 21 wherein said effective amount is 250 mg/patient/day.

31 (new): A method of inhibiting gastric acid secretion which comprises administering to a patient in need thereof an effective amount of a therapeutic compound of the formula:



wherein

A^0 = Gly, Nle, α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal, or is deleted;

A^1 = the D or L-isomer of any of pGlu, Nle, or α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), F_5-Phe, Trp, Cys, or β-Nal, or is deleted;

A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, β-Nal, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α-aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

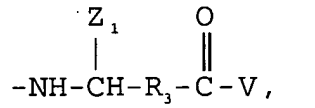
A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α-aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH_3), Trp, Thr, or β-Nal;

A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

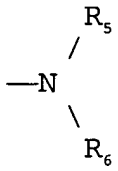
A^7 = 1-methyl-His, 3-methyl-His or His;

provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

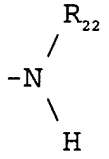
(I):



wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH, or CH_3), F_5-Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β-Nal; and V is either OR_4, or

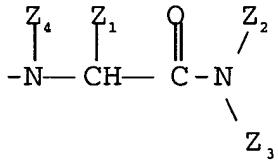


where R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and each R_5, and R_6, independently, is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, lower acyl, or



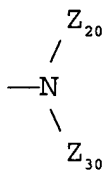
where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

(II):



wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β-Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3), F_5-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2, Z_3, and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):



wherein each Z_{20} and Z_{30}, independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2, independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1, the other must be H, or a pharmaceutically acceptable salt thereof.

32 (new): The method of claim 31 wherein said therapeutic peptide is of the formula:

A^0 = Gly, D-Phe, or is deleted;

A^1 = p-Glu, D-Phe, D-Ala, D-β-Nal, D-Cpa, or D-Asn;

A^2 = Gln, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala;

A^5 = Val;

A^6 = Sar, Gly, D-Phe, or D-Ala;

A^7 = His;

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2, Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is CHOH-CH_2, Z_1 is the identifying group of Leu, cyclohexyl-Ala,

or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR_6, and R_6 is NH_2; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3); and each Z_2, Z_3 and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30}, is H; and each R_1 and R_2, independently, is H, lower alkyl, or lower acyl.

33 (new): The method of claim 32 wherein said therapeutic peptide is of the formula:
D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

34 (new): The method of claim 32 wherein said therapeutic peptide is of the formula:
p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

35 (new): The method of claim 32 wherein said therapeutic peptide is of the formula:
D-Cpa-Gln-Trp-Ala-Val-Gly-His-β-Leu-NH_2.

36 (new): The method of claim 31 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4, and R_4 is any of C_{1-20}alkyl, C_{3-20}alkenyl, C_{3-20}alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F_5-Phe.

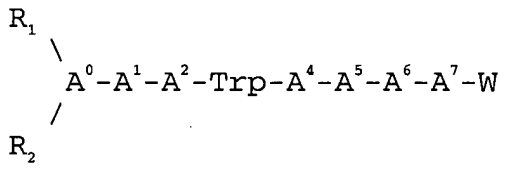
37 (new): The therapeutic peptide of claim 36 of the formula:
D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

38 (new): The therapeutic peptide of claim 32 of the formula:
D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH_2.

39 (new): The method of claim 31 wherein said effective amount is 0.5 μg/kg/day to 5 mg/kg/day.

40 (new): A method of treating motility disorders of the GI tract which comprises administering to a patient in

need thereof an effective amount of a therapeutic compound of the formula:



wherein

A^0 = Gly, Nle, α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal, or is deleted;

A^1 = the D or L-isomer of any of pGlu, Nle, or α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), F_5-Phe, Trp, Cys, or β-Nal, or is deleted;

A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, β-Nal, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α-aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α-aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH_3), Trp, Thr, or β-Nal;

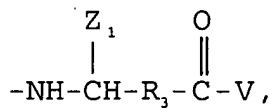
A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

A^7 = 1-methyl-His, 3-methyl-His or His;

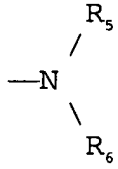
provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu;

further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

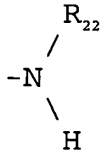
(I):



wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH, or CH_3), F_5-Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β-Nal; and V is either OR_4, or

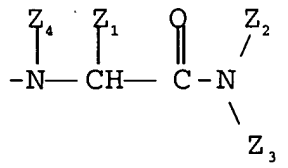


where R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and each R_5, and R_6, independently, is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, lower acyl, or



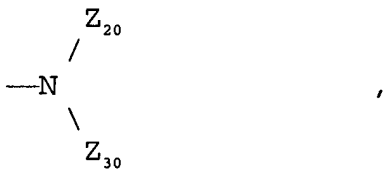
where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

(II):



wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β-Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3), F_5-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2, Z_3, and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):



wherein each Z_{20} and Z_{30}, independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2, independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1, the other must be H, or a pharmaceutically acceptable salt thereof.

41 (new): The method of claim 40 wherein said therapeutic peptide is of the formula:

A^0 = Gly, D-Phe, or is deleted;

A^1 = p-Glu, D-Phe, D-Ala, D-β-Nal, D-Cpa, or D-Asn;

A^2 = Gln, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala;

A^5 = Val;

A^6 = Sar, Gly, D-Phe, or D-Ala;

A^7 = His;

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2, Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is CHOH-CH_2, Z_1 is the identifying group of Leu, cyclohexyl-Ala, or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR_6, and R_6 is NH_2; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3); and each Z_2, Z_3 and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30}, is H; and each R_1 and R_2, independently, is H, lower alkyl, or lower acyl.

42 (new): The method of claim 41 wherein said therapeutic peptide is of the formula:
D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

43 (new): The method of claim 41 wherein said therapeutic peptide is of the formula:
p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

44 (new): The method of claim 41 wherein said therapeutic peptide is of the formula:
D-Cpa-Gln-Trp-Ala-Val-Gly-His-β-Leu-NH_2.

45 (new): The method of claim 40 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4, and R_4 is any of C_{1-20}alkyl, C_{3-20}alkenyl, C_{3-20}alkinyl, phenyl,

naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F_5-Phe.

46 (new): The therapeutic peptide of claim 45 of the formula:
D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

47 (new): The therapeutic peptide of claim 41 of the formula:
D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH_2.

48 (new): The method of claim 40 wherein said effective amount is 0.5 μg/kg/day to 5 mg/kg/day.

49 (new): A method of suppressing amylase release which comprises administering to a patient in need thereof an effective amount of a therapeutic peptide of the formula:

$$R_1 \backslash A^0\text{-}A^1\text{-}A^2\text{-}Trp\text{-}A^4\text{-}A^5\text{-}A^6\text{-}A^7\text{-}W \quad / \; R_2$$

wherein

A^0 = Gly, Nle, α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal, or is deleted;

A^1 = the D or L-isomer of any of pGlu, Nle, or α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), F_5-Phe, Trp, Cys, or β-Nal, or is deleted;

A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, β-Nal, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α-aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

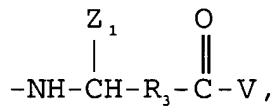
A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α-aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH_3), Trp, Thr, or β-Nal;

A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

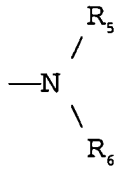
A^7 = 1-methyl-His, 3-methyl-His or His;

provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

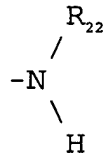
(I):



wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH, or CH_3), F_5-Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β-Nal; and V is either OR_4, or

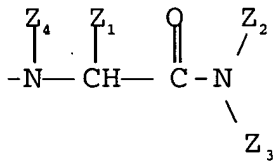


where R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and each R_5, and R_6, independently, is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, lower acyl, or



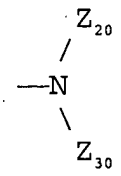
where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

(II):



wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β-Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3), F_5-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2, Z_3, and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):



wherein each Z_{20} and Z_{30}, independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2, independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1, the other must be H, or a pharmaceutically acceptable salt thereof.

50 (new): The method of claim 49 wherein said therapeutic peptide is of the formula:

A^0 = Gly, D-Phe, or is deleted;

A^1 = p-Glu, D-Phe, D-Ala, D-β-Nal, D-Cpa, or D-Asn;

A^2 = Gln, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala;

A^5 = Val;

A^6 = Sar, Gly, D-Phe, or D-Ala;

A^7 = His;

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2, Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is CHOH-CH_2, Z_1 is the identifying group of Leu, cyclohexyl-Ala,

or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR_6, and R_6 is NH_2; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3); and each Z_2, Z_3 and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30}, is H; and each R_1 and R_2, independently, is H, lower alkyl, or lower acyl.

51 (new): The method of claim 50 wherein said therapeutic peptide is of the formula:
D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

52 (new): The method of claim 50 wherein said therapeutic peptide is of the formula:
p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

53 (new): The method of claim 50 wherein said therapeutic peptide is of the formula:
D-Cpa-Gln-Trp-Ala-Val-Gly-His-β-Leu-NH_2.

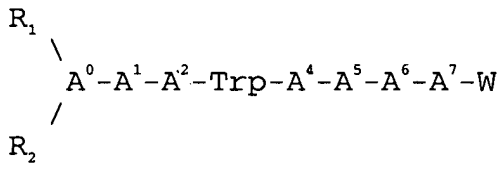
54 (new): The method of claim 49 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4, and R_4 is any of C_{1-20}alkyl, C_{3-20}alkenyl, C_{3-20}alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F_5-Phe.

55 (new): The therapeutic peptide of claim 54 of the formula:
D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

56 (new): The therapeutic peptide of claim 50 of the formula:
D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH_2.

57 (new): The method of claim 49 wherein said effective amount is 0.5 μg/kg/day to 5 mg/kg/day.

58 (new): A method of treating cancer cachexia which comprises administering to a patient in need thereof an effective amount of a therapeutic compound of the formula:



wherein

A^0 = Gly, Nle, α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal, or is deleted;

A^1 = the D or L-isomer of any of pGlu, Nle, or α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), F_5-Phe, Trp, Cys, or β-Nal, or is deleted;

A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, β-Nal, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α-aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

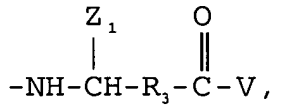
A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α-aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH_3), Trp, Thr, or β-Nal;

A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

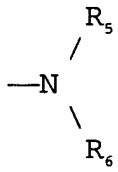
A^7 = 1-methyl-His, 3-methyl-His or His;

provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

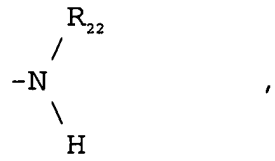
(I):



wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH, or CH_3), F_5-Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β-Nal; and V is either OR_4, or

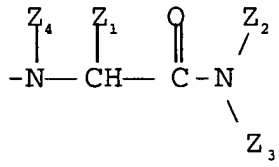


where R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and each R_5, and R_6, independently, is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, lower acyl, or



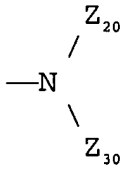
where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

(II):



wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β-Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3), F_5-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2, Z_3, and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):



wherein each Z_{20} and Z_{30}, independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further

provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2, independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1, the other must be H, or a pharmaceutically acceptable salt thereof.

59 (new): The method of claim 58 wherein said therapeutic peptide is of the formula:

A^0 = Gly, D-Phe, or is deleted;

A^1 = p-Glu, D-Phe, D-Ala, D-β-Nal, D-Cpa, or D-Asn;

A^2 = Gln, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala;

A^5 = Val;

A^6 = Sar, Gly, D-Phe, or D-Ala;

A^7 = His;

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2, Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is CHOH-CH_2, Z_1 is the identifying group of Leu, cyclohexyl-Ala, or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR_6, and R_6 is NH_2; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3); and each Z_2, Z_3 and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30}, is H; and each R_1 and R_2, independently, is H, lower alkyl, or lower acyl.

60 (new): The method of claim 59 wherein said therapeutic peptide is of the formula: D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

61 (new): The method of claim 59 wherein said therapeutic peptide is of the formula: p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

62 (new): The method of claim 59 wherein said therapeutic peptide is of the formula: D-Cpa-Gln-Trp-Ala-Val-Gly-His-β-Leu-NH_2.

63 (new): The method of claim 58 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4, and R_4 is any of C_{1-20}alkyl, C_{3-20}alkenyl, C_{3-20}alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F_5-Phe.

64 (new): The therapeutic peptide of claim 63 of the formula: D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

65 (new): The therapeutic peptide of claim 59 of the formula: D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH_2.

66 (new): The method of claim 58 wherein said effective amount is 0.5 μg/kg/day to 5 mg/kg/day.

67 (new): A method of inhibiting growth hormone release which comprises administering to a patient in need thereof an effective amount of a therapeutic peptide of the formula:

$$R_1 \diagdown A^0\text{-}A^1\text{-}A^2\text{-}Trp\text{-}A^4\text{-}A^5\text{-}A^6\text{-}A^7\text{-}W \diagup R_2$$

wherein

A^0 = Gly, Nle, α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal, or is deleted;

A^1 = the D or L-isomer of any of pGlu, Nle, or α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), F_5-Phe, Trp, Cys, or β-Nal, or is deleted;

A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, β-Nal, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α-aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

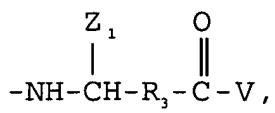
A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α-aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH_3), Trp, Thr, or β-Nal;

A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

A^7 = 1-methyl-His, 3-methyl-His or His;

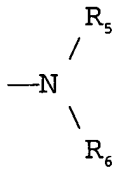
provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

(I):

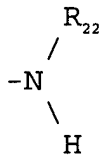


wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val,

Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH, or CH_3), F_5-Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β-Nal; and V is either OR_4, or

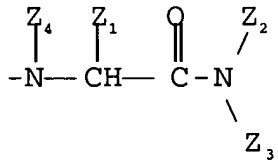


where R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and each R_5, and R_6, independently, is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, lower acyl, or



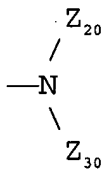
where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

(II):



wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β-Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3), F_5-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2, Z_3, and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):



wherein each Z_{20} and Z_{30}, independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2, independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1, the other must be H, or a pharmaceutically acceptable salt thereof.

68 (new): The method of claim 67 wherein said therapeutic peptide is of the formula:

A^0 = Gly, D-Phe, or is deleted;

A^1 = p-Glu, D-Phe, D-Ala, D-β-Nal, D-Cpa, or D-Asn;

A^2 = Gln, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala;

A^5 = Val;

A^6 = Sar, Gly, D-Phe, or D-Ala;

A^7 = His;

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2, Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is CHOH-CH_2, Z_1 is the identifying group of Leu, cyclohexyl-Ala,

or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR_6, and R_6 is NH_2; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3); and each Z_2, Z_3 and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30}, is H; and each R_1 and R_2, independently, is H, lower alkyl, or lower acyl.

69 (new): The method of claim 68 wherein said therapeutic peptide is of the formula:
D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

70 (new): The method of claim 68 wherein said therapeutic peptide is of the formula:
p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

71 (new): The method of claim 68 wherein said therapeutic peptide is of the formula:
D-Cpa-Gln-Trp-Ala-Val-Gly-His-β-Leu-NH_2.

72 (new): The method of claim 67 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4, and R_4 is any of C_{1-20}alkyl, C_{3-20}alkenyl, C_{3-20}alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F_5-Phe.

73 (new): The therapeutic peptide of claim 72 of the formula:
D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

74 (new): The therapeutic peptide of claim 68 of the formula:
D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH_2.

75 (new): The method of claim 67 wherein said growth hormone is a factor in the progression of muscular dystrophy in a patient.

76 (new): The method of claim 67 wherein said growth hormone is a factor in the onset of diabetes in a patient.

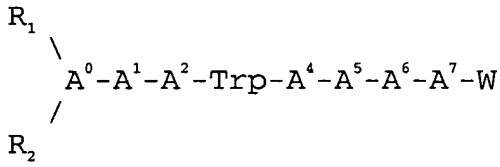
77 (new): The method of claim 67 wherein said growth hormone is a factor in the development of diabetes-related retinopathy in a patient.

78 (new): The method of claim 67 wherein said effective amount is 0.5 μg/kg/day to 5 mg/kg/day.

79 (new): The method of claim 67 wherein said effective amount is 0.01 μg/kg/day to 1000 μg/kg/day.

80 (new): The method of claim 67 wherein said effective amount is 0.1 μg/kg/day to 100 μg/kg/day.

81 (new): A method of treating artherosclerosis which comprises administering to a patient in need thereof an effective amount of a therapeutic peptide of the formula:



wherein

A^0 = Gly, Nle, α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal, or is deleted;

A^1 = the D or L-isomer of any of pGlu, Nle, or α-aminobutyric acid, or the D-isomer of any of Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), F_5-Phe, Trp, Cys, or β-Nal, or is deleted;

A^2 = pGlu, Gly, Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, β-Nal, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle, α-aminobutyric acid, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

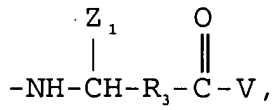
A^5 = Gln, Asn, Gly, Ala, Leu, Ile, Nle, α-aminobutyric acid, Met, Val, p-X-Phe (where X = F, Cl, Br, OH, H or CH_3), Trp, Thr, or β-Nal;

A^6 = Sar, Gly, or the D-isomer of any of Ala, N-methyl-Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe (where X = F, Cl, Br, NO_2, OH, H or CH_3), Trp, Cys, or β-Nal;

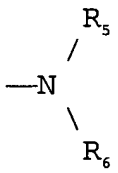
A^7 = 1-methyl-His, 3-methyl-His or His;

provided that, if A^0 is present, A^1 cannot be pGlu; further provided that, if A^0 or A^1 is present, A^2 cannot be pGlu; further provided that, when A^0 is deleted and A^1 is pGlu, R_1 must be H and R_2 must be the portion of Glu that forms the imine ring in pGlu; and further provided that, W can be any one of the following:

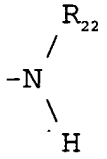
(I):



wherein R_3 is $CHR_{20}-(CH_2)_{n1}$ (where R_{20} is either of H or OH; and n1 is either of 1 or 0), or is deleted, and Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH, or CH_3), F_5-Phe, Trp, Cys, Met, Pro, HyPro, cyclohexyl-Ala, or β-Nal; and V is either OR_4, or

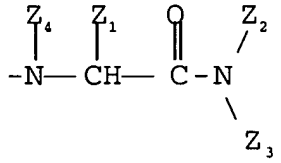


where R_4 is any of C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and each R_5, and R_6, independently, is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, lower acyl, or



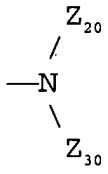
where R_{22} is any of H, C_{1-12} alkyl, C_{7-10} phenylalkyl, or lower acyl; provided that, when one of R_5 or R_6 is $-NR_{22}$, the other is H;

(II):



wherein Z_1 is the identifying group of any of the amino acids Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, β-Nal, Gln, p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3), F_5-Phe, Trp, Cys, Met, Pro, or HyPro; and each Z_2, Z_3, and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; or

(III):



wherein each Z_{20} and Z_{30}, independently, is H, lower alkyl, lower phenylalkyl, lower naphthylalkyl; further provided that, when either of Z_{20} or Z_{30} is other than H, A^7 is His, A^6 is Gly, A^5 is Val, A^4 is Ala, A^2 is His, and either of R_1 or R_2 is other than H, A^1 must be other than deleted; further provided that, for the formulas (I) through (III), any asymmetric carbon atom can be R, S or a racemic mixture; and further provided that each R_1 and R_2, independently, is H, C_{1-12} alkyl, C_{7-10} phenylalkyl, COE_1 (where E_1 is C_{1-20} alkyl, C_{3-20} alkenyl, C_{3-20} alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl), or lower acyl, and R_1 and R_2 are bonded to the N-terminal amino acid of said peptide, and further provided that when one of R_1 or R_2 is COE_1, the other must be H, or a pharmaceutically acceptable salt thereof.

82 (new): The method of claim 81 wherein said therapeutic peptide is of the formula:

A^0 = Gly, D-Phe, or is deleted;

A^1 = p-Glu, D-Phe, D-Ala, D-β-Nal, D-Cpa, or D-Asn;

A^2 = Gln, His, 1-methyl-His, or 3-methyl-His;

A^4 = Ala;

A^5 = Val;

A^6 = Sar, Gly, D-Phe, or D-Ala;

A^7 = His;

and, where W is (I) and R_3 is CH_2 or CH_2-CH_2, Z_1 is the identifying group of Leu or Phe, where W is (I) and R_3 is CHOH-CH_2, Z_1 is the identifying group of Leu, cyclohexyl-Ala,

or Phe and each R_5 and R_6 is H; and where W is (I), V is NHR_6, and R_6 is NH_2; where W is (II), Z_1 is the identifying group of any one of the amino acids Leu or p-X-Phe (where X = H, F, Cl, Br, NO_2, OH or CH_3); and each Z_2, Z_3 and Z_4, independently, is H, lower alkyl, lower phenylalkyl, or lower naphthylalkyl; and where W is (III), each Z_{20} and Z_{30}, is H; and each R_1 and R_2, independently, is H, lower alkyl, or lower acyl.

83 (new): The method of claim 82 wherein said therapeutic peptide is of the formula:
D-Phe-Gln-Trp-Ala-Val-Gly-His-Leu-ethylamide.

84 (new): The method of claim 82 wherein said therapeutic peptide is of the formula:
p-Glu-Gln-Trp-Ala-Val-Gly-His-statine-amide.

85 (new): The method of claim 82 wherein said therapeutic peptide is of the formula:
D-Cpa-Gln-Trp-Ala-Val-Gly-His-β-Leu-NH_2.

86 (new): The method of claim 81 wherein said therapeutic peptide is of the formula: W is (I), V is OR_4, and R_4 is any of C_{1-20}alkyl, C_{3-20}alkenyl, C_{3-20}alkinyl, phenyl, naphthyl, or C_{7-10} phenylalkyl, and A^6 is N-methyl-D-Ala or A^1 is D-F_5-Phe.

87 (new): The therapeutic peptide of claim 86 of the formula:
D-Phe-Gln-Trp-Ala-Val-N-methyl-D-Ala-His-Leu-methylester.

88 (new): The therapeutic peptide of claim 82 of the formula:
D-Cpa-Gln-Trp-Ala-Val-D-Ala-His-β-Leu-NH_2.

89 (new): The method of claim 81 wherein said effective amount is 0.5 μg/kg/day to 5 mg/kg/day.